ORDER

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

7110.99

6/23/86

SUBJ: HANDLING OF ULTRALIGHT VEHICLES

- l. <u>PURPOSE</u>. This Order establishes procedures for the handling of ultralight vehicles.
- 2. $\underline{\text{DISTRIBUTION}}$. This Order is distributed to division level in Air Traffic and $\overline{\text{Flight Standards}}$ in Washington and regional headquarters; the Mike Monroney Aeronautical Center; and all air traffic field offices.
- 3. <u>REQUESTS FOR INFORMATION</u>. Questions concerning this order and input for its further development or changes should be submitted to ATO-300 through normal coordination channels.

4. BACKGROUND.

- a. The growth of ultralight operations has resulted in increased air traffic control (ATC) involvement with these vehicles and a need to provide procedures for the handling of ultralight vehicle operations.
- b. Because ultralight operators are not required to meet any aeronautical knowledge or experience requirements, there is no assurance that the operator of an ultralight has the skill necessary to operate in the ATC environment. The speed and flight characteristics of ultralights, especially as related to wake turbulence, may make them incompatible with aircraft operations. In view of these considerations, ultralight vehicles should be segregated from all non-ultralight aircraft in the use of runways and the airport surface.
- c. Since most ultralight operators are not certificated pilots, there is a high potential they are not familiar with aviation or meteorological terminology. Flight plan service is not provided for ultralight vehicles due to the limited range and duration of ultralight flights. However, for flight planning purposes, the operators have a need for weather and aeronautical information, much of which is obtainable only through FSS facilities.
- d. Airport managers develop rules for the use of an airport's facilities by all operators on a nondiscriminatory basis. The right to operate is conditioned on a number of safety factors relating to the operation of different types of aircraft and vehicles. Airport managers may establish minimum requirements for the use of an airport.

e. Some ultralight vehicles have been certificated as experimental aircraft. While they may be handled as ordinary aircraft, their flight characteristics and susceptibility to wake turbulence require extreme care and prudent ATC judgment when mixing them with normal operations.

5. RESPONSIBILITIES.

- a. All Air Traffic Managers shall review Federal Aviation Regulations (FAR) Part 103 Ultralight Vehicles and Advisory Circular 103-6, Ultralight Vehicle Operations Airports, Air Traffic Control, and Weather, in conjunction with this Order and implement procedures pertinent to their facility.
- b. Where ultralight operations are authorized, ATC facility managers, with the assistance of Flight Standards, are responsible for developing local procedures segregating ultralight vehicles from all non-ultralight aircraft in the traffic pattern, in the use of runways, and on the airport surface.
- c. FSS facility managers are responsible for ensuring that all flight service personnel are briefed on the policy and guidelines contained in this order for providing weather and aeronautical information to ultralight operators.

6. PROCEDURES.

- a. ATC authorization to operate an ultralight vehicle in airport traffic areas, control zones, airport radar service areas, terminal control areas, or positive control areas shall be carefully reviewed and approval/disapproval predicated on vehicle equipment capability and the effect such activity will have on the safety and efficiency of the ATC system. Ultralight operators have been advised to request this authorization by personal visit, telephone, or writing. While not prohibited, it is not expected that authorization would be issued to airborne ultralights on a routine basis. The majority of authorizations can be handled by a Letter of Agreement (LOA) with the user.
- b. Issue wake turbulence advisories to all ultralight vehicles operating in close proximity to all weight class/categories of aircraft.
- c. If designated ultralight vehicle operating areas (surface) are established, they should be segregated from other airport operations by the following recommended minima which have been coordinated with Flight Standards.

Aircraft Categories	Edge of Ultralight Area from Edge of Runways			
I & II	500 feet			
III	1000 feet			
HEAVY	2500 feet			

- d. LOA's authorizing use of airspace by ultralights should define specific areas, altitudes when possible, and the most effective ingress/egress routes segregating them from aircraft operations. Traffic pattern altitudes designated for ultralights should be 500 feet below normal aircraft patterns and when possible no lower than 500 feet AGL. Airport management should be a signatory to all LOA's permitting operations on the airport.
- e. At airports with control zones, but no tower or a part-time tower, FSS's may be delegated, in an LOA with the controlling facility, the authority to authorize individual ultralight operations.
- f. Ultralights equipped with radios are issued Federal Communications Commission (FCC) control numbers consisting of 5 digits and the letter "U." Operators have been advised to precede their control numbers with "ultralight." Example: "Ultralight 1-2-3-4-5-Uniform 5 miles west." ATC instructions and authorizations should be issued using standard phraseology whenever possible, except when operating to and from a runway do not clear ultralights for takeoff and landing. Use phrases such as: "south departure from uniform area approved" or "operation in X-ray area approved."
- g. Except when operating on a runway do not attempt to separate ultralights from one another. When authorizing ultralight operations on runways do not permit simultaneous operations with other aircraft or ultralight vehicles on the same runway or intersecting runways.
- h. FSS's shall provide weather and aeronautical information to ultralight operators in accordance with procedures as defined in FAAH 7110.10, Flight Services, Chapter 3, Pilot Briefing. The briefing presentation may require the FSS specialist to use interpretive phrasing and simplification of terminology to assure complete understanding of the information by the operator. Record briefings by entering the ultralight FCC control number or the pilot's last name on FAA Form 7233-2, Preflight Briefing Log, with the notation "ultralight" in remarks.

Seln R. Ryan

Director, Air Traffic Operations Service